

IN THE CLAIMS:

Amend claims 1, 3, 4, 11, 13-16, 18-20 and 22, cancel¹ claims 2, 12, 17 and 21 without prejudice or admission, and add new claims 23-30 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. (currently amended) A manufacturing method of a liquid crystal display unit, comprising: having a polymeric substrate having a longitudinal length longer than a transversal width, and transparent electrodes disposed on the polymeric substrate,

~~the manufacturing method comprising:~~

a first step of providing a roll of a first flexible polymeric substrate having a longitudinal length longer than a transversal width;

a second step of forming transparent electrodes on the first flexible polymeric substrate;

a third step of a vertical orientation film forming process for forming a vertical orientation film on the first flexible polymeric substrate; and

¹ Claims 5-10 were canceled by the response filed December 28, 2004.

a fourth step of a solidifying process for
solidifying the vertical orientation film;

a fifth step of prescribing a falling direction of
liquid crystal molecules in the vertical orientation film; and

a sixth step of connecting the first flexible
polymeric substrate to an opposed second flexible polymeric
substrate;

wherein the first flexible polymeric substrate is
continuously fed from the roll moved in the longitudinal
direction during the second, third, fourth, fifth and sixth
steps. ~~during the vertical orientation film forming process~~
~~and the solidifying process.~~

2. (canceled).

3. (currently amended) A manufacturing method of a
liquid crystal display unit according to ~~claim 2;~~ wherein
claim 1; wherein the fifth step orientation process is
performed by irradiating light in one direction onto the
vertical orientation film.

4. (currently amended) A manufacturing method of a
liquid crystal display unit according to ~~claim 2;~~ wherein
claim 1; wherein the fifth step orientation process is
performed by rubbing the vertical orientation film in parallel
with the longitudinal direction of the first flexible
polymeric substrate.

5. - 10. (canceled)².

11. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 1; ~~further comprising a patterning process for forming the transparent electrodes on the polymeric substrate before the vertical orientation film forming process; wherein~~ further comprising a step of arranging a buffer of the first flexible polymeric substrate is arranged within the patterning process, or between the patterning process and the vertical orientation film forming process, so as to continuously move the polymeric substrate in the longitudinal direction in the vertical orientation film forming process during the second step, or between the second step and the third step, so as to continually feed the first flexible polymeric substrate from the roll in the longitudinal direction during the third step.

12. (canceled).

13. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 11; wherein the fifth step orientation process is performed by irradiating light in one direction onto the vertical orientation film.

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See footnote 1.

14. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 11; wherein the fifth step orientation process is performed by rubbing the vertical orientation film in parallel with the longitudinal direction of the first flexible polymeric substrate.

15. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 14; wherein the third step comprises the step of forming the vertical orientation film ~~contains~~ containing at least one high polymer selected from the group consisting of polyimides, cinnamates, chalcones and azobenzenes.

16. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 13; wherein the third step comprises the step of forming the vertical orientation film ~~contains~~ containing at least one high polymer selected from the group consisting of polyimides, cinnamates, chalcones and azobenzenes.

17. (canceled).

18. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 11; wherein the third step comprises the step of forming the vertical orientation film ~~contains~~ containing at least one high polymer

selected from the group consisting of polyimides, cinnamates, chalcones and azobenzenes.

19. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 4; wherein the third step comprises the step of forming the vertical orientation film ~~contains~~ containing at least one high polymer selected from the group consisting of polyimides, cinnamates, chalcones and azobenzenes.

20. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 3; wherein the third step comprises the step of forming the vertical orientation film ~~contains~~ containing at least one high polymer selected from the group consisting of polyimides, cinnamates, chalcones and azobenzenes.

21. (canceled).

22. (currently amended) A manufacturing method of a liquid crystal display unit according to claim 1; wherein the third step comprises the step of forming the vertical orientation film ~~contains~~ containing at least one high polymer selected from the group consisting of polyimides, cinnamates, chalcones and azobenzenes.

23. (new) A manufacturing method of a liquid crystal display unit, comprising the steps of:

providing a roll of a flexible polymeric substrate having transparent electrodes and a longitudinal length longer than a transversal width; and

continuously feeding the flexible polymeric substrate from the roll in the longitudinal direction while sequentially forming a vertical orientation film on the flexible polymeric substrate, solidifying the vertical orientation film, and prescribing a falling direction of liquid crystal molecules in the vertical orientation film.

24. (new) A manufacturing method of a liquid crystal display unit according to claim 23; further comprising the steps of arranging the flexible polymeric substrate in confronting relation to an opposing flexible polymeric substrate to define a gap therebetween; and disposing a liquid crystal having a negative dielectric anisotropy in the gap between the flexible polymeric substrates.

25. (new) A manufacturing method of a liquid crystal display unit according to claim 23; wherein the falling direction of liquid crystal molecules in the vertical orientation film is prescribed by irradiating light in one direction onto the vertical orientation film.

26. (new) A manufacturing method of a liquid crystal display unit, comprising the steps of:

providing first and second rolls of respective first and second flexible polymeric substrates each having a longitudinal length longer than a transversal width;

continuously feeding the first flexible polymeric substrate from the first roll in the longitudinal direction while sequentially forming transparent electrodes on the first flexible polymeric substrate, forming a vertical orientation film on the first polymeric substrate, solidifying the vertical orientation film, and prescribing a falling direction of liquid crystal molecules in the vertical orientation film;

continuously feeding the second flexible polymeric substrate from the second roll in the longitudinal direction while sequentially forming transparent electrodes on the second flexible polymeric substrate, forming a vertical orientation film on the second polymeric substrate, solidifying the vertical orientation film formed on the second polymeric substrate, and prescribing a falling direction of liquid crystal molecules in the vertical orientation film formed on the second polymeric substrate;

arranging the first and second flexible polymeric substrates opposite one another to define a gap therebetween; and

disposing a liquid crystal having a negative dielectric anisotropy in the gap between the first and second flexible polymeric substrates.

27. (new) A manufacturing method of a liquid crystal display unit according to claim 26; wherein in each of the continuously feeding steps, the falling direction of liquid crystal molecules in the vertical orientation film is prescribed by irradiating light in one direction onto the vertical orientation film.

28. (new) A manufacturing method of a liquid crystal display unit according to claim 26; wherein in each of the continuously feeding steps, the falling direction of liquid crystal molecules in the vertical orientation film is prescribed by rubbing the vertical orientation film in parallel with the longitudinal direction of the corresponding first or second flexible polymeric substrate.

29. (new) A manufacturing method of a liquid crystal display unit according to claim 26; wherein each of the continuously feeding steps includes the step of arranging a buffer of the corresponding first or second flexible polymeric substrate during formation of the transparent electrodes or between the formation of the transparent electrodes and the formation of the vertical orientation film.

30. (new) A manufacturing method of a liquid crystal display unit according to claim 26; wherein for each of the continuously feeding steps, the vertical orientation film is formed so as to contain at least one high polymer selected from the group consisting of polyimides, cinnamates, chalcones and azobenzenes.